

### DISCUSSION OF THE AMENDMENT

Due to the length of the specification herein, Applicants will cite to the paragraph number of the published patent application (PG Pub) of the present application, i.e., US 2006/0110576, when discussing the application description, both in this section and in the Remarks section, *infra*, rather than to page and line of the specification as filed.

Table 1 of the specification has been amended to correct an error, the amendment being supported by the description for Embodiments 1 and 7, and by inserting a column for Embodiment 8, the data therein being supported by the description at paragraphs [0142]-[0144] and [0199] combined.

Claim 1 has been amended by limiting resin (B) to a crystalline resin, and by incorporating the subject matter of Claim 3 therein, except that the lower limit of the range is crystallization temperature -10°C, as supported in the specification at paragraph [0032]. Other amendments are non-substantive, including rearranging the claim language, replacing the terms “including” and “containing” with the synonymous term --comprising--; deleting brackets; and deleting the term “steps of”.

Claim 3 has been canceled.

Claims 12 and 14 have been amended to be consistent with the above-discussed amendment to Claim 1.

New Claims 24-27 have been added. Claim 24 is supported in the specification at paragraph [0015]. Claims 25 and 26 are supported in the specification at paragraph [0065]. Claim 27 is supported in the specification at paragraph [0069].

No new matter is believed to have been added by the above amendment. Claims 1, 2 and 11-27 are now pending in the application. Of these claims, Claims 2, 11, 13, 15, 17 and 19-23 stand withdrawn from consideration.

REMARKS

The rejection of Claims 1, 12 and 18 under 35 U.S.C. § 103(a) as unpatentable over EP 0623448 (EP '448), is respectfully traversed.

As recited in above-amended Claim 1, an embodiment of the present invention is a molding method for manufacturing a resin molding by charging a resin composition comprising fibrous filler (A) and crystalline resin (B) in molten state into a die by injection, the resin composition comprising not less than 7 wt % to less than 30 wt % of the fibrous filler (A) and more than 70 wt % to not exceeding 93 wt % of the crystalline resin (B), the method comprising:

charging the resin composition in a molten state into the die when a temperature of the die is in a range of Vicat softening point -20°C to less than a melting point of the resin (B), thereby shaping the resin composition,

after the resin composition is shaped, holding the temperature of the die for a predetermined time in a temperature range from a crystallization temperature -10°C to the crystallization temperature +10°C of the crystalline resin (B), and

cooling down the die to a temperature which allows taking-out of a molded product.

Thus, the presently-claimed invention is characterized by at least three discrete temperature-related steps, i.e., charging at a particular die temperature range, whereby the resin composition is shaped; holding at a different particular die temperature range for a predetermined period of time; and cooling the die to a temperature which allows taking-out of a molded product.

EP '448 differs from the above-discussed temperature control pattern of the present invention. Nor does EP '448 suggest such a pattern. Rather, in EP '448, the die temperature is raised by heating **after** injecting the resin while in the present invention, as discussed above, the die temperature is set at a predetermined range **before** injecting the resin. In

addition, the die temperature is then held at a temperature range from the crystallization temperature  $-10^{\circ}\text{C}$  to the crystallization temperature  $+10^{\circ}\text{C}$  for a predetermined time, followed by subsequent cooling. In other words, heating and cooling patterns are different between the present invention and EP '448.

In EP '448, the surface of the mold cavity is heated to a temperature below the softening temperature of an interface between their thermoplastic resin and the mold cavity surface (page 5, line 20ff), which temperature is different from the Vicat softening point  $-20^{\circ}\text{C}$  to less than the melting point, as recited in the present claims (at a range exceeding the softening point, though partially overlapped).

In EP '448, after the resin is brought into contact with the die, the temperature of the mold cavity surface is raised to above the softening temperature. In the present invention, on the other hand, the die is held at the crystallization temperature  $-10^{\circ}\text{C}$  to the crystallization temperature  $+10^{\circ}\text{C}$  of the resin, which is not raised above the softening point. By holding the die in the above-described temperature range, lifting of the fibrous filler can be restrained and appearance and dimensional accuracy of the resin molding can be improved, as described in the specification herein at paragraph [0026].

Such differences in temperature range and process pattern (i.e., heating, holding and subsequent cooling) clearly distinguish the present invention from EP '448.

For all the above reasons, it is respectfully requested that the rejection be withdrawn.

The rejection of Claims 3 and 14 under 35 U.S.C. § 103(a) as unpatentable over EP '448, and further in view of EP 1142689 (EP '689), is respectfully traversed. The disclosures and deficiencies of EP '448 have been discussed above. EP '689 does not remedy these deficiencies.

Aside from the fact that EP '689 is drawn to blow molding, while the invention of the active claims is drawn to, in effect, injection molding, which is a different field of endeavor,

Application No. 10/530,713  
Reply to Office Action of October 30, 2008

nevertheless, EP '689's holding step is outside the range of the holding step of the present claims. EP '689's holding step is in a range of from crystallization temperature -15°C to crystallization temperature -45°C. The Examiner has apparently confused the holding temperature in EP '689, which is as discussed above, with the molding or shaping temperature therein, which falls between the crystallization temperature minus 10°C to crystallization temperature plus 10°C of the resin [0026].

For all the above reasons, it is respectfully requested that the rejection be withdrawn.

The rejection of Claim 16 under 35 U.S.C. § 103(a) as unpatentable over EP '448, and further in view of EP 0364803 (EP '803), is respectfully traversed. The disclosures and deficiencies of EP '448 have been discussed above. EP '803 does not remedy these deficiencies. EP '803 is simply relied on for a disclosure of fiber content range. But even if such a fiber content were used in EP '448, the result would still not be the presently-claimed invention.

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The objection to Claims 1, 3, 12 and 14 is now moot in view of the above-discussed amendment. Accordingly, it is respectfully requested that the objection be withdrawn.

All of the presently-active claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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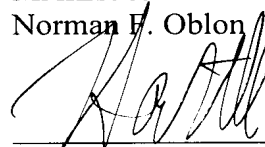
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